

THE DER WEEKLY

www.eren.doe.gov/der

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Distributed Energy Resources...the Power of Choice

● Industry News

GE To Acquire Enron's Wind Business

On February 20, GE Power Systems announced it has signed a definitive agreement to acquire certain assets of Enron Wind Corp., a global manufacturer of wind turbine generators and a wholly owned subsidiary of Enron Corp. If the transaction passes regulatory and bankruptcy court approval, it is expected to close in April 2002. "The acquisition of Enron Wind represents GE Power Systems' initial investment into renewable wind power, one of the fastest growing energy sectors," said John Rice, President and CEO of GE Power Systems. The wind energy industry is expected to grow at an annual rate of about 20 percent, with principal markets in Europe, the US, and Latin America.

Business Wire, February 20

Ballard and Ford Sign Power Gen Agreement

Ballard Power Systems' Electric Drives and Power Conversion Division and Ford Power Products have entered an agreement to jointly develop commercial power generation products driven by spark-ignited combustion engines. The companies plan to target the generators for the prime power, standby power, and emergency power markets. Ross Witschonke, Vice President of Ballard's Electric Drives and Power Conservation Division, said, "By joining with Ford Power Products we are able to leverage our world leading power conversion capabilities with Ford's proven combustion engines to deliver cleaner, more efficient and more comprehensive customer solutions in today's distributed and standby power generation markets." The initial products are expected to be available by the end of this year.

Energy Info Source, February 19

RealEnergy Installs CHP System for CalPERS

RealEnergy, an onsite power company, announced that it completed an onsite combined heat and power (CHP) system for the California Public Employees' Retirement System (CalPERS), in Costa Mesa, California. The system has a 1 MW capacity and includes five natural-gas combustion engines. In addition to providing power for the building, it will also produce heat and cold water that will be used onsite. CalPERS already uses three on-site power generation systems, and this application marks RealEnergy's 13th distributed generation installation. RealEnergy has 12 other projects under

development, which will use a combination of CHP and solar systems, depending on building requirements and space restrictions.

Business Wire, February 18

Quantum Comp. & DIC to Develop Materials

Quantum Composites, Inc., a developer and manufacturer of composite compounds, and Dainippon Ink and Chemicals (DIC), a Japanese chemical company, have signed an agreement to create a fuel cell materials research program. The companies will focus on the development of conductive thermoset molding compounds for compression and injection molding of fuel cell bi-polar plates, which will most appropriate for proton exchange membrane and direct methanol fuel cells. According to Quantum, this technology will improve performance, lifecycle, and efficiency for fuel cell systems. Quantum also plans to patent its conductive thermoset molding compounds for the fuel cell market.

Fuel Cells Today, February 21

● Regional Office News

Electric Interconnection Standards Workshop

The Chicago Regional Office sponsored a one-day Electric Interconnection Standards Workshop on February 12. The purpose of the workshop was to share lessons learned from ongoing state interconnect procedure development, identify common elements that may apply throughout the region, build relationships between state policy makers involved with interconnect procedure development, and provide perspectives from nationally recognized leaders in interconnect standards. Approximately 20 people attended the workshop including state regulators/staff involved with constructing state grid interconnect rules from Indiana, Iowa, Wisconsin, Michigan, Illinois, Missouri, and Minnesota. State Energy Office staff from Illinois and Missouri, also attended. Joe Galdo, Program Manager for the Distributed Power Program, and Dick DeBlasio, Principal Engineer at the National Renewable Energy Laboratory, presented overviews of the U.S. Department of Energy Distributed Energy Resources Program and the status of the work on developing a National Interconnection Standard IEEE P1547, respectively. A representative from the Public Utility Commission of Texas, Terri Eaton, presented the "Texas experience".

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*To date, more than 330 megawatts of renewable energy capacity has been installed or is planned as a result of green pricing programs – enough to meet the power needs of nearly 140,000 homes.**

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Demand Response Programs and Technologies Highlighted at FERC-DOE Conference

The Federal Energy Regulatory Commission (FERC) and the U.S. Department of Energy (DOE) co-sponsored a Demand Response Conference on February 14 in Washington, D.C. The purpose of the conference was to raise awareness about demand response programs' potential role in efficient market operations for electric power. Approximately 400 people attended, including several representatives from the Office of Distributed Energy Resources. In addition, twenty-five vendors exhibited products and services.

David Garman, Assistant Secretary for Energy Efficiency and Renewable Energy, offered opening remarks, and discussed what programs and activities the Department of Energy currently has underway to address demand response opportunities, including energy efficiency R&D and the development of energy efficiency standards. Assistant Secretary Garman announced that DOE would be co-funding a new demand response activity, the New England Demand Response Initiative, which is aimed at developing a coordinated set of demand response initiatives for the New England regional power markets.

FERC Chairman Pat Wood III and Commissioner William Massey also offered opening remarks, which stressed the importance of demand-side energy management. Chairman Wood remarked that demand-side reductions reduce the length and frequency of price spikes and mitigate market power. Commissioner Massey asked conference attendees to help FERC develop a policy supportive of demand-responsiveness as it moves ahead to create a standard market design. He noted that FERC—which historically believed that conservation was an issue for the states—just recently began considering demand response programs.

Throughout the day, panelists presented information on the status of demand response programs, their attractiveness to customers, and their effectiveness in reducing electricity demand and prices when power systems are constrained. Panelists also discussed the appropriate roles of Federal and state governments and identified actions to expand the use of cost-effective demand response programs. Presentations and meeting handouts have been posted on the Electricity Restructuring website at www.eren.doe.gov/electricity_restructuring.

● DOE News

Touchstone Energy Conference and Expo

William Parks, Associate Deputy Assistant Secretary for the Office of Power Technologies, gave a presentation at the general session of Touchstone Energy's New and Emerging Technologies Conference & Expo on February 20. Mr. Parks also moderated a panel session the following day on Distributed Energy Resources. His presentation, "Distributed Energy Resources-Current Status and Future Prospects," covered an array of activities the Department of Energy is currently undertaking in DER and also future efforts such as power parks, a hydrogen economy, and zero net energy buildings.

Industrial Center, Inc. TMAC Meeting

Patricia Hoffman, Director for the Office of DER, delivered a presentation at the Industrial Center, Inc., Technology and Market Assessment Committee Meeting on February 22. Her presentation, trends in Distributed Energy Technologies—A DOE Perspective, covered a range of topics from the transmission reliability tools being developed to Federal and state collaboration.

● UTRC Visits ORNL

Dr. Tom J. Rosfjord, Dr. Tim Wagner, and Michael Hains from United Technologies Research Center (East Hartford, Conn.) visited Oak Ridge National Laboratory (ORNL) on Monday February 18th. In the morning they visited the Buildings Technology Research Center and the Cooling, Heating And Power (CHP) Integration Laboratory. Discussions included the DOE/ORNL Packaged CHP System subcontract with UTRC, refrigeration systems, and appliance research. In the afternoon they visited the High-Temperature Materials Laboratory (HTML). Topics included advanced materials for micro-turbines and carbon foam heat exchangers.

● What's on the Web

NREL Highlights Leading Utility Green Power Programs

The National Renewable Energy Laboratory released an updated listing of leading utility "green pricing" programs. Green pricing is a special electricity rate option that consumers can choose to help support additional electrical production from renewable resources such as solar and wind. More than 90 utilities in 31 states now offer these programs. Results can be found at:

www.eren.doe.gov/greenpower/topten.shtml

*Ranked by the amount of new energy produced, the green pricing program of Austin (Texas) Energy is first in the nation, followed by Xcel Energy (Colo.), the Los Angeles Department of Water and Power (LADWP), Sacramento Municipal Utility District, and Madison (Wisc.) Gas and Electric (MGE).**

Calendar of Events

FEBRUARY 2002			
Feb 25-March 1	Turbine Power Systems Conference and Condition Monitoring Workshop	Galveston, TX	www.netl.doe.gov
Feb 27-March 1	15th Annual IDEA College/University Conference	Denver, CO	www.districtenergy.org
Feb 27-March 1	DistribuTECH	Miami Beach, FL	www.pennwellevents.com
Feb 27-March 1	Hydrogen Storage Technology—Status and Critical Needs	Hilton Head, SC	william.summers@srs.gov
MARCH 2002			
4-8	Design of Low Emission Gas Turbine Combustors	Irvine, CA	www.ucicl.uci.edu/GTESC/
7	Fuel Cells Costs/Benefits	Ramapo, NJ	Energy Star/Fuel Cell meeting, Athena Sarafides; 609-633-1161
7-8	Distributed Generation	South San Francisco, CA	www.aeecenter.org/seminars
11-13	6th Annual Distributed Generation & On-Site Power Conference	Atlanta, GA	www.dist-gen.com ; (508) 427-9470; gesi@mediaone.net
12	National Energy Modeling System/Annual Energy Outlook Conference	Washington, DC	www.eia.doe.gov/oiaf/aeo/conf/
13-15	Power System 2002 Conference: Impact of Distributed Generation	Clemson, SC	www.ces.clemson.edu/powsys2002/main.htm
14-15	Fundamentals of Energy Management	Las Vegas, NV	www.aeecenter.org/seminars
12-14	DOE Gas Turbine and Microturbine Programs Peer Review	Fairfax, VA	Debbie Haught (202) 586-2211
17-21	EPRI's 7th Distributed Resources Conference and Expo	Dallas, TX	www.epri.com/programHigh.asp?program=238295&objid=266151
19-21	Electric Power 2002	St. Louis, MO	www.electricpowerexpo.com
20-23	Building Energy Conference	Medford, MA	www.nesea.org ; (877) 44-SOLAR, ext. 20
22	Indiana/Caterpillar CHP Workshop	Indianapolis, IN	Ethan Rogers, (317) 232-8961
25-26	Fundamentals of Cogeneration & On-site Generation	Philadelphia, PA	www.aeecenter.org/seminars
26-27	2nd Annual Fuel Cell Investor	New York, NY	www.srinstitute.com/cr218
27-28	GLOBALCON Energy/Facilities Management Conference & Expo	Philadelphia, PA	www.aeecenter.org/seminars

*Ranked by customer participation rates, the top five are Moorhead (Minn.) Public Service, LADWP, Orcas Power and Light Cooperative (Wash.), Holy Cross Energy (Colo.), and MGE.**

Calendar of Events

APRIL 2002			
2-3	Implementing Renewable Energy Projects	Washington, DC	Gail Norby, (303) 526-5528, gail@imaginitech.com
3-4	The 2002 Hydrogen Investment Forum	Washington, DC	www.intertechusa.com
8-9	Colorado Wind and Distributed Energy: Renewables for Rural Prosperity	Denver, CO	www.state.co.us/oemc
8-9	Fuel Cells and Distributed Power Conference	Stamford, CT	www.bccresearch.com/fuel_cells
15-17	EESAT 2002, Electric Energy Storage—Applications and Technologies	San Francisco, CA	www.sandia.gov/EESAT; Dr. Imre Gyuk (202) 586-1482
21-23	4th Annual Small Fuel Cells Conference	Washington, DC	custserv@knowledgefoundation.com
30-May2	Houston Energy Expo	Houston, TX	www.nesamet.org
MAY 2002			
1-3	External Combustion Engines—New Strategies for Efficient, Green Power Generation	Los Angeles, CA	chuck@intertechusa.com
2	Green Power: Turn it On! Getting to 10% Conference	Harrisburg, PA	Maryanne Daniel; 215-656-6964
14-16	E-Vision 2002: Shaping Our Future by Reducing Energy Intensity in the U.S. Economy	Arlington, VA	Jeff Dowd; jeff.dowd@ee.doe.gov
23-24	FEMP DER Workshop	Atlanta, GA	Lisa Hollingsworth 404-562-0569
JUNE 2002			
2-5	Energy 2002 Workshop and Expo: Hot Challenges, Cool Solutions	Palm Springs, CA	(703) 243-8343, www.energy2002.ee.doe.gov
6-7	West Coast Energy Management Congress	Anaheim, CA	(703) 243-8343, www.aeeecenter.org
16-18	National Accounts Conference and Exhibition (American Gas Association)	Nashville, TN	TheGasChoice.com
26-29	Building Energy 2002 and the Mid-Atlantic Sustainability Conference	East Brunswick, NJ	www.nesea.org
AUGUST 2002			
18-23	Summer Study on Energy Efficiency in Buildings	Pacific Grove, CA	www.aceee.org

* Source-NREL Top 10 Report for Utility Green Power Pricing Programs.